DEC 21 2007

Patent
Docket No.: PLI-1184

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:)
)
BENNETT, L et al.)
)
Serial No.: 10/682,209) Group Art Unit: 1744
)
Filed: 8 October 2003) Examiner: Redding, David
A.
)
For: **PRINTING WEB CLEANER**)

37 CFR 1.131 DECLARATION OF LES BENNETT AND DIANNA HOWARD

We, Les Bennett and Dianna Howard, hereby declare and state as follows:

Les Bennett & Dianna Howard

1. Under the final *Office Action* of 21 August 2007, Claims 2, 3, and 7-19 are pending in the present application, and all stand rejected under 35 USC § 103(a) as being unpatentable over US 6,598,261 to Howard, the effective date of this reference being 13 March 2003, its publication date.
2. It has been explained to us that we may submit a 37 CFR 1.131 *Declaration* to overcome the present rejections.
3. It has been explained to us that we can utilize a 37 CFR 1.131 *Declaration* to demonstrate that we conceived of the present invention prior to the effective date of the reference on which the rejections are based; that we subsequently reduced to practice the present invention after the effective date of that reference; and that we were diligent from prior to the effective date of that reference to the time of reduction to practice.
4. This document is a 37 CFR 1.131 *Declaration* meeting the above criteria, and thus, we believe the pending claims are allowable over the cited reference.

Les Bennett

5. I, Les Bennett, am a Director of Predictive Maintenance Company Ltd, also known as PDM Ltd, of 27 Lyndale Road, Bingley, West Yorkshire BD16 3HE. United Kingdom. I have held this position since October 1991. PDM Ltd is a company engaged in the development, manufacture and sale of web cleaning apparatus for the printing industry.

6. As used herein except in the following section, titled "Dianna Howard," all references to "I" and "me" are equivalent to "Les Bennett."

7. After gaining a B.Sc. (Eng) Honours degree in engineering from King's College, London University, I held a variety of positions in product development with the Plessey Co. (military communication equipment), and in manufacturing with General Electric (industrial control equipment). I then obtained an MBA from Manchester Business School and was recruited by Vickers, where I was appointed Sales & Marketing Director to their Crabtree-Vickers business unit, a company manufacturing printing machinery, including newspaper printing presses. In 1984, I founded Lee James Graphic Systems Ltd., a company marketing specialist products to the printing industry in the United Kingdom and other parts of Europe. In 1991, I founded PDM Ltd. as a vehicle to develop specialist web cleaning equipment to meet the specific needs for the printing industry.

8. I met Paul Howard in 1993.

9. I am a named inventor on US patent application 10/682,209.

Dianna Howard

10. I, Dianna Howard, am the executrix of the estate of Paul Howard.

11. Paul Howard began working in the letter press printing industry in 1954 at the age of 16. From 1960 to 1979 he worked in the offset printing industry and during this time he studied offset printing, graduating from Los Angeles Tech. During this time he was also alerted to problems caused in printing by paper dust. He continued to work in the printing industry for various companies until 1980.

12. In 1980 Paul Howard co-founded Web Systems, Inc. to manufacture web cleaning systems for the printing industry and was involved in product development for this company.

13. In 1989 Paul Howard founded his own company "Dee-Paul Graphic Services" where he developed, manufactured and marketed further web cleaning systems, in particular for

the newspaper industry.

14. Paul Howard met Les Bennett of PDM Ltd. in 1993.

15. Paul Howard was responsible for all product manufacturing and testing of products supplied to PDM Ltd.

16. Paul Howard is a named inventor on US patent application 10/682,209.

17. Paul Howard died in January of 2002.

18. It has been explained to me that under 37 CFR 1.131, and in conjunction with 37 CFR 1.42, as the executrix of the estate of Paul Howard, I may execute this Declaration on his behalf.

Conception

19. Paul Howard and I discussed using a smooth roller in a web cleaner as ultimately claimed in this application in Sweden in April 2001.

20. Paul Howard and I worked on the development of the web cleaning apparatus as described in US Patent No. 6,598,261, of which Paul Howard is listed as the sole inventor. I appreciated that it was desirable to gain a better understanding of the action of the rollers in generating air currents, and of the nature of the air currents generated. I also appreciated, however, that constructing test apparatus to measure directly the air currents generated in different circumstances would be prohibitively time consuming and expensive.

21. I decided to commission a feasibility study to assess whether the nature of the air currents could be investigated by computer modeling. The feasibility study was carried out by The University of Sheffield, England on the basis of a contract signed on or about 7 February 2002.

22. A copy of the Feasibility Study Report from the University of Sheffield is attached as Exhibit A.

23. At the time of commissioning the feasibility study, I was skeptical as to whether the results would be of value. My understanding and belief at that time was that rollers having a rough or textured outer surface, such as cotton tufted rollers, were necessary in order to generate the required air currents, while the Computational Fluid Dynamics (CFD) analysis technique which The University of Sheffield proposed to use was capable of

modeling only smooth-surfaced rollers.

24. The Feasibility Study Report by The University of Sheffield is dated 4 March 2002 and was received by me the following day, 5 March 2002.

25. When I read the report, the paragraph on page 7, stating "According to data provided by PDM the above combination of operating conditions is consistent with a flow velocity of 24 m/sec through the cleaning slot. CFD predicted an average of 23.65 m/sec," was of significance to me.

26. The figure of 24 m/sec for the air flow velocity through the cleaning slot was a value previously measured on an actual apparatus using textured rollers. The close correlation between the actual figure of 24 m/sec for an apparatus using actual textured rollers and the modeled figure of 23.65 m/sec on the basis of modeling smooth rollers made me realize that, contrary to my earlier expectations, the CFD analysis technique was of value in modeling the nature of the air flows and, moreover, that contrary to my earlier belief, the use of rough or textured rollers was not essential. Thus the close correlation of the real and modeled air flow velocities led me to the realization that the web cleaning apparatus could be used successfully with smooth surfaced rollers, which provides significant advantages in terms of the cost of manufacture and the durability of the rollers in service.

27. Thus, as it has been explained to us and as outlined above, Paul Howard and I conceived of the present invention in April 2001, and confirmation that using smooth rollers were a practical solution occurred when I received the results of the CFD modeling from Sheffield University on 5 March 2002, after Paul Howard's death.

Constructive Reduction to Practice on 8 October 2003

28. On 8 October 2003, the present application was filed, thereby, as it has been explained to us, constructively reducing to practice the present invention.

Due Diligence from March 2003 to October 2003

29. It has been explained to us that under 37 CFR 1.131(b), we must show that we were diligent from prior to the effective date of the reference on which the rejections are based, 13 March 2003, through the date of constructive reduction to practice, 8 October 2003.

30. This period from 13 March 2003 through 8 October 2003 thus relates only to actions on Les Bennett's part, as Paul Howard had passed in January 2002.

31. The impact of Paul Howard's death was hard on me. I had to re-configure and re-build my own business, as I had essentially lost access to one of my main product suppliers, and lost Paul Howard's product development expertise and facilities.

32. After Paul Howard's death in January of 2002, while focusing on the business, I commissioned the feasibility study carried out by The University of Sheffield, England on the basis of a contract signed on or about 7 February 2002.

33. I continued to work on the concepts of the inventions of this application, US Serial No. 10/682,209, and began thinking of patent protection schemes for same both in the UK and US.

34. I made contact with Albert Cota, Paul Howard's patent agent (and his agent on US Patent No. 6,598,261), when I traveled to the US in June 2003. I came to the US to attend the NEXPO (North American Newspaper exhibition) in Las Vegas, June 15-20, 2003.

35. Albert Cota and I worked diligently on reducing the inventions of US Serial No. 10/682,209 to writing as we together draft a US patent application that became the US Serial No. 10/682,209 patent application filing, made 8 October 2003.

36. Thus, from prior to the effective date of the reference through the filing date of the present invention, I was diligent for this term.

Les Bennett

37. We, Les Bennett and Dianna Howard, declare under penalty of perjury under the laws of the United States of America that the foregoing is true and correct. These statements were made with the knowledge that willful false statements and the like are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful statements may jeopardize the validity of the application or any patent issued thereon.

Les Bennett Date 17th December 2007

Dianna Howard	December 17, 2009
Dianna Howard	Date